

Table

Present Invention	D1	D2	D3	D4	D5
method for assaying a molecule	method for studying surface binding kinetics	method for probing chromatin in the cell nucleus	method for determining fluorescence lifetimes	method for studying interactions and kinetics of single molecules	method for particle counting
laser-excited FCS	TIR/FCS: a laser beam totally reflects at a surface-solution interface, forming an electro-magnetic field (page 103, right column, line 14 to page 104, left column, line 16) in contrast to FCS (page 104, left column, line 17 con't.)	laser-excited FCS	laser-excited FCS (only cross-correlation between two photon-detectors)	laser-excited FCS	FCS by using a circulating beam
distance of the measuring volume from a laser focusing optics: $\leq 1000 \mu\text{m}$					objective with working distance of $14000 \mu\text{m}$ (description of Figure 2).
measuring time of ≤ 500 ms	fluorescence fluctuations are auto-correlated with reasonable statistical accuracy in 5-45 min (page 109, right column, line 33 con't.)		the duration of every experiment was 9 h (page 165, left column, line 37 con't.)	auto-correlation function is obtained in seconds or less (page 13, lines 27 con't.)	typical measurement time 1-3 min. (page 987, right column, line 32).
determination of material-specific parameters	measuring specific binding kinetics between two chemical species, one of which is immobilized on a surface	determination of diffusion coefficients, concentrations ratio of bound to free dyes, viscosity of nuclear material	determination of fluorescence decay time of dyes	evaluation of the fraction of bound/unbound bungarotoxin (Figure 2.6 b)	simultaneous determination of molar weights are lateral diffusion constants of particles